

London School of Hygiene and Tropical Medicine, Gower St. WGL

8 Aug 53

Dear Josh,

How are things with you? I have not heard from you for weeks and weeks, I hope this only means that you are too busy to write, or are on holiday.

I am farly well disorganised by my rather inefficient efforts to get organised for my move to the Lister and for trip to Italy. I now have a full car-load of passengers, very full in fact, we shall all have to take practically no luggage, but I am buying a roof-rack which should help a bit. What a pity you two are not going to be there. I am just trying to write the invited paper; it will necessarily repeat Norton's CSH paper quite a bit; I shall try and work in some of my micro-manipulation results so that there is something fresh in it even for people who were at CSH.

I have done some more of these and still have not solved the difficulty of motile cells getting ~~down~~ stuck at the interfaces. I now have one quite definite example of limited and irregular replication of the "trail-producing" gene. One of the progeny of an early motile cell, divided up at the 8 cell stage, produced ++ non-motile cells together with 50 or so motiles: I isolated a good many of these, most produced only non-motiles, the rest produced trail-equivalents, i.e. ++ non-motiles and one motile, except for one which again gave ++ non-motiles and c. 80 motiles; I picked a great many of these to separate droplets but got only all NM, or (N++ and 1 M). The different behaviour in fluid and in semi-solid remains unexplained, I intend to do some more platings of single cells but this is much more laborious than putting them in droplets. As usual everything takes longer than I expected, however in Oct I hope to get down to it.

I have 3 (presumed) S typhi O strains from Le Minor which I will send you next week. One responds to TM2 lysate with swarms which are d, and rare phase? j. (vita) The others give trails but no swarms. I will also send his para A O and paralysed; these are ~~are~~ unresponsive. I sent ~~you~~ your Gal +/- strain to Spicer as I had no EMB made up but forgot to ask him what he found; maybe he has written to you. He is away on holiday.

The Jgm paper is now in press but they say the proofs won't come before latter part of Sept which is as well as I shall be back by then to deal with them. Do you have a reference for the L and Edwards paper yet? I take it I may refer to it at Rome.

- 10 Aug. The cultures from Le Minor are as follows
- T35/52. Gr. D. O., *S. typhi* by biochem etc. (Le Minor & Garbar, Ann. Inst. Past. ^{Sept 52})
 I have got swarms with d by treatment c/f/TM2.
 also one spont. Also second phase? j via serum.
- T1/53. also presumptive *Styphi* O from Roscha, see Zeit. fur Hyg
 1953-136-400. c/f/TM2 evokes a few trails, no swarms,
 suppressed by anti-d serum.
- T39/52. Sent as an *Styphi* O. (Vi -, like the other two), from
 Dr MOSER, Hambrogh. (No details or reference). I think it
 is another Fla- linked to He locus as c/f/TM2 evokes
 v. numerous trails (no swarms so far) which require anti-d
 + anti-i to suppress them.
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|-------------|-------------------|-------------------------|---|
| A. 205. Be. | <i>S. para A.</i> | normal H | } Le Minor 1952
Ann. Inst. Past.
83-167 |
| " " Im. | " " " | analysed H | |
| " " Im. | " " " | O | |
| " " J. | " " " | weakly mitis + H agglut | |

Love to Esther: I suppose you are all as well as hell now, as we no doubt
 shall be when we get to Italy. Yrs Bruce

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